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EXAMINER

TIMBLIN, ROBERT M

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/762,866	Applicant(s) TURPIN ET AL.	
	Examiner ROBERT TIMBLIN	Art Unit 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action corresponds to application 10/762,866 which was filed on 22 January 2004. Claims 1-43 are currently pending.

Reopening of Prosecution

In view of the Pre-Appeal Brief filed on 3/12/2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/John R. Cottingham/

Supervisory Patent Examiner, Art Unit 2167

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Specifically, the Applicant's disclosure lacks definition of the "computer-readable medium" to provide antecedent basis for the term found in claims 4 and 43. Although it is noted that Applicant mentions a "disk" (paragraph 0036 of the disclosure), this instance is seen to define a storage of data rather than a "computer-readable medium comprising program code). Examiner respectfully requests the computer-readable medium to be clearly defined so that the scope of this limitation can be ascertained.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: file 305 (e.g. mentioned in at least the abstract

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of

Art Unit: 2167

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 10, 20, 30 and 40 are unclear with the usage of the word “thereby.” The use of this phraseology makes the scope of the claim unclear and should be amended to remove this phrase and recite the limitation to be more descriptive of the locking process.

Claims 11, 31, and 43 are objected to because they recite a step of “*extracting* file data *into...*” The Examiner finds the wording of this phrase confusing because it is unclear how an element can be “extracted into” rather than “extracted from”. A suggested correcting amendment such as “extracting file data from” (e.g. see claim 41) would be clearer.

Claims 21-28, 32-37 because the phrase “is to” should be amended to recite “is configured to” as to recite a more positive limitation. The components of the claims should also be “configured to” as to positively recite performing a function.

Claim 33 is objected to because the dash (i.e. “-“) after 31 should be removed.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 21-40 are rejected under 35 U.S.C. 101 because the apparatus claimed therein describes functional descriptive material (i.e. software per se) and are thus nonstatutory. Furthermore, the apparatus of these claims do not define or require hardware to facilitate structure to be considered a hardware apparatus. Rather, they define pure software embodiments (e.g. a local imager which can be accomplished by software; see disclosed paragraph 0043) and are thus not statutory under 35 U.S.C. 101.

Otherwise, if Applicant intends these claims to be a "software apparatus", then the apparatus should be stored on a defined and statutory (i.e. precluding signals and carrier waves etc.) computer readable medium or memory as to impart functionality when executed. See MPEP 2106.01.

Claims 42-43 are rejected under 35 U.S.C. 101 because they may be interpreted to include nonstatutory subject matter. Specifically, the computer-readable medium may be seen as nonstatutory embodiments (e.g. carrier waves, signals, etc.) which are not compliant under 35 U.S.C. 101. If the computer-readable medium can best be interpreted as a statutory medium (e.g. computer memory and/or storage medium supported from the specification), then the claims *may* be statutory under further review.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-43 are rejected under 35 U.S.C. 102(e) as being described by U.S. Patent 6,615,365 B1 issued to Jenevein et al. ('Jenevein' hereafter). In the following, Jenevein teaches and describes:

With Respect to claim 1. A method for backing up a file system in a partition comprising a plurality of allocation units, the method comprising:
copying (col. 5 line 31-32) each allocation unit (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) occupied by a plurality of files (col. 11 line 56-65) of the file system (drawing references 102, 104, and col. 5 line 46) to a locally-stored image file (e.g. an "in-partition image"; col. 5 line 7-10, col. 12 line 65-col. 13 line 5), wherein the locally-stored image file (e.g. an "in-partition image"; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) is located within (drawing reference 420) the same partition (col. 5 lines 7-8, and line 52) as the file system (102, 104, and col. 5 line 46) being backed up (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8); and

adding a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) to the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) that associates copied allocation units (col. 10 line 38) in the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) with names of corresponding files (col. 10 line 51-54) from the file system (102, 104, and col. 5 line 46).

With Respect to claim 2. The method of claim 1, wherein copying comprises compressing at least a subset of the allocation units (col. 8 line 63-64).

With Respect to claim 3. The method of claim 1, wherein copying comprises: maintaining a record of a pre-imaging state of the file system (col. 5 line 58-59); and copying only allocation units occupied by files included within the pre-imaging state of the file system (col. 5 line 60-67).

With Respect to claim 4. The method of claim 1, wherein adding comprises grouping within the locally-stored image file the copied allocation units for individual files of the file system (col. 13 line 42-47).

With Respect to claim 5. The method of claim 1, wherein copying comprises storing within the locally-stored image file one or more attributes related to each file, wherein the attributes are selected from the group consisting of ownership attributes,

Art Unit: 2167

access-control attributes, timestamp attributes, archival attributes, indexing attributes, encryption attributes, and compression attributes (col. 10 line 49; e.g. the image comprises a date/time of creation).

With Respect to claim 6. The method of claim 1, further comprising marking a beginning point (col. 11 line 2, col. 14 line 15) of the locally-stored image file to assist in locating the locally-stored image file (col. 14 line 29-48) in the event of directory area corruption (col. 11 line 38-42).

With Respect to claim 7. The method of claim 6, wherein marking comprises storing a unique beginning-of-image marker at an initial allocation unit occupied by the locally-stored image file (col. 14 line 15-16).

With Respect to claim 8. The method of claim 6, wherein marking comprises storing at a predetermined area of the partition a location of an initial allocation unit occupied by the locally-stored image file (col. 5 line 21-24).

With Respect to claim 9. The method of claim 1, further comprising protecting the locally- stored image file from accidental deletion or modification (col. 22 line 51).

With Respect to claim 10. The method of claim 9, wherein protecting is selected from the group consisting of: providing a filter driver that intercepts and denies

Art Unit: 2167

requests to access the locally-stored image file; and initiating a process that opens and thereby locks the locally-stored image file (col. 15 line 3-10 and col. 20 line 10-12).

With Respect to claim 11. A method for restoring a file system to a partition comprising a plurality of allocation units, the method comprising:

accessing (col. 14 line 28; e.g. locating an image) a locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) located within (drawing reference 420) the partition (col. 5 lines 7-8, and line 52) to which the file system (drawing references 102, 104, and col. 5 line 46) is to be restored (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8), the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) comprising a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) and file data for a plurality of files (col. 10 line 36-45);

initializing at least a subset (col. 1 line 41-46; e.g. formatting a partition) of the allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) of the partition not occupied by the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) including one or more allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) used for a directory area of the partition;

extracting the file data into the initialized allocation units without disturbing the locally-stored image file (abstract, col. 22 line 16-21); and

creating a new directory area for the partition (col. 20 line 50-51) using the directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32; e.g. the use of an image for restoration describes creating a new directory in the partition being restored).

With Respect to claim 12. The method of claim 11, wherein the directory map associates names for the plurality of files with corresponding portions of the file data (col. 10 line 50-60), and wherein creating comprises generating a new directory area for the partition that associates the file names with the extracted file data (col. 1 line 41-43, col. 7 line 44-50).

With Respect to claim 13. The method of claim 11, wherein creating comprises adding an indication of the locally-stored image file to the new directory area (col. 9 line 10-15).

With Respect to claim 14. The method of claim 11, wherein extracting comprises decompressing at least a subset of the file data (col. 12 line 46-47).

With Respect to claim 15. The method of claim 11, wherein the directory map indicates at least one attribute for a file (col. 10 line 37-42), and wherein creating comprises setting the at least one attribute for the file in the directory area (col. 10 line 25-67), wherein the at least one attribute is selected from the group consisting of an ownership attribute, an access control attribute, a timestamp attribute, an archival

Art Unit: 2167

attribute, an indexing attribute, an encryption attribute, and a compression attribute (col. 10 line 49; e.g. the image comprises a date/time of creation).

With Respect to claim 16. The method of claim 11, wherein accessing comprises searching for an allocation unit containing a unique beginning-of-image marker (col. 14 line 15-16) for the locally-stored image file (col. 14 line 29).

With Respect to claim 17. The method of claim 11, wherein accessing comprises reading from a predetermined area of the partition a location of an initial allocation unit of the locally-stored image file (col. 5 line 21-24).

With Respect to claim 18. The method of claim 11, further comprising defragmenting the locally-stored image file within the partition prior to extracting the file data (col. 14 line 36-37).

With Respect to claim 19. The method of claim 11, further comprising protecting the locally-stored image file from accidental deletion (col. 22 line 51).

With respect to claim 20. The method of claim 19, wherein protecting is selected from the group consisting of: providing a filter driver that intercepts and denies requests to access the locally-stored image file; and initiating a process that opens and thereby locks the locally-stored image file (col. 15 line 3-10 and col. 20 line 10-12).

With respect to claim 21. An apparatus for backing up a file system in a partition comprising a plurality of allocation units, the apparatus comprising:

a local imager (618) to copy each allocation unit (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) occupied by a plurality of files (col. 11 line 56-65) of the file system (drawing references 102, 104, and col. 5 line 46) to a locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5),

wherein the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) is located within (drawing reference 420) the same partition (col. 5 lines 7-8, and line 52) as the file system (102, 104, and col. 5 line 46) being backed up (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8); and

wherein the local imager (618) is to add a directory map col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) to the locally-stored image file that associates copied allocation units (col. 10 line 38) in the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) with names of corresponding files (col. 10 line 51-54) from the file system (102, 104, and col. 5 line 46).

With Respect to claim 22. The apparatus of claim 21, wherein the local imager is to compress at least a subset of the allocation units copied to the locally-stored image file (col. 8 line 63-64).

With Respect to claim 23. The apparatus of claim 21, wherein the local imager is to maintain a record of a pre-imaging state of the file system (col. 5 line 58-59) and to copy only allocation units occupied by files included within the pre-imaging state of the file system (col. 5 line 60-67).

With Respect to claim 24. The apparatus of claim 21, wherein the local imager is to group within the locally-stored image file the copied allocation units for individual files of the file system (col. 13 line 42-47).

With Respect to claim 25. The apparatus of claim 21, wherein the local imager is to store within the locally-stored image file one or more attributes relating to at least one file of the file system, wherein the file attributes are selected from the group consisting of ownership attributes, access-control attributes, timestamp attributes, archival attributes, indexing attributes, encryption attributes, and compression attributes (col. 10 line 49; e.g. the image comprises a date/time of creation)..

With Respect to claim 26. The apparatus of claim 21, wherein the local imager is to mark a beginning point of the locally-stored image file to assist in locating the locally-stored image file in the event of directory area corruption (col. 11 line 38-42).

With Respect to claim 27. The apparatus of claim 26, wherein the local imager is to mark the beginning point by storing a unique beginning-of-image marker (col. 14

Art Unit: 2167

line 15-16) at an initial allocation unit occupied by the locally-stored image file (col. 14 line 29).

With Respect to claim 28. The apparatus of claim 26, wherein the local imager is to mark the beginning point by storing at a predetermined area of the partition a location of an initial allocation unit occupied by the locally-stored image file (col. 5 line 21-24).

With Respect to claim 29. The apparatus of claim 21, further comprising a protection component to prevent accidental deletion or modification of the locally-stored image file (col. 22 line 51).

With Respect to claim 30. The apparatus of claim 27, wherein the protection component is selected from the group consisting of: a filter driver that intercepts and denies requests to access the locally-stored image file; and a process that opens and thereby locks the locally-stored image file (col. 15 line 3-10 and col. 20 line 10-12).

With Respect to claim 31. An apparatus for restoring a file system to a partition comprising a plurality of allocation units, the apparatus comprising:

an image locator (620) to find (col. 14 line 29- line 48) a locally-stored image file (e.g. an “in-partition image”) located within (420) the partition (col. 5 lines 7-8, and line 52) to which the file system is to be restored (col. 5 line 40-45, col. 14 line 22-23, col. 19

Art Unit: 2167

line 6-8), the locally-stored image file (e.g. an “in-partition image”) comprising a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) and file data for a plurality of files (col. 10 line 50-67);

a media formatter (602, col. 1 line 41-45) to initialize (col. 1 line 41-46; e.g. formatting a partition) at least a subset of the allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) of the partition (col. 5 lines 7-8, and line 52) not occupied by the locally-stored image file (e.g. an “in-partition image”) including one or more allocation units used for a directory area (col. 20 line 50-51) of the partition (col. 5 lines 7-8, and line 52);

a data extractor (734) to extract the file data into the initialized allocation units without disturbing the locally-stored image file (e.g. an “in-partition image”); and

a directory area builder (712) to build a new directory area (col. 20 line 50-51) for the partition using the directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32).

With Respect to claim 32. The apparatus of claim 31, wherein the directory map associates names for the plurality of files with corresponding portions of the file data, and wherein the directory area builder is to generate a new directory area for the partition that associates the file names with the extracted file data (col. 1 line 41-43, col. 7 line 44-50).

With Respect to claim 33. The apparatus of claim 31-, wherein the directory area builder is to add an indication of the locally-stored image file to the new directory area (col. 9 line 10-15).

With Respect to claim 34. The apparatus of claim 31, wherein the data extractor is to decompress at least a subset of the file data (col. 12 line 46-47).

With Respect to claim 35. The apparatus of claim 31, wherein the directory map indicates at least one attribute for a file, wherein the directory area builder is to set the at least one attribute of the file in the directory area, and wherein the at least one attribute is selected from the group consisting of an ownership attribute, an access control attribute, a timestamp attribute, an archival attribute, an indexing attribute, an encryption attribute, and a compression attribute (col. 10 line 49; e.g. the image comprises a date/time of creation).

With Respect to claim 36. The method of claim 31, wherein the image locator is to search for an allocation unit containing a unique beginning-of-image marker (col. 14 line 15-16) for the locally-stored image file (col. 14 line 29).

With Respect to claim 37. The method of claim 31, wherein the image locator is to read from a predetermined area of the partition a location of at least a first allocation unit of the locally-stored image file (col. 5 line 21-24).

With Respect to claim 38. The apparatus of claim 31, further comprising an image defragmenter to defragment the locally-stored image file within the partition before the data extractor extracts the file data (col. 14 line 36-37).

With Respect to claim 39. The apparatus of claim 31, further comprising a protection component to prevent accidental deletion of the locally-stored image file (col. 22 line 51).

With Respect to claim 40. The apparatus of claim 39, wherein the protection component is selected from the group consisting of: a filter driver that intercepts and denies requests to access the locally-stored image file; and a process that opens and thereby locks the locally-stored image file (col. 15 line 3-10 and col. 20 line 10-12).

With Respect to claim 41. A method for localized backup and restoration of a file system in a partition comprising a plurality of allocation units, the method comprising:

copying (col. 5 line 31-32) each allocation unit (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) occupied by a plurality of files (col. 11 line 56-65) of the file system (drawing references 102, 104, and col. 5 line 46) to a locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5), wherein the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col.

Art Unit: 2167

13 line 5) is located within (drawing reference 420) the same partition (col. 5 lines 7-8, and line 52) as the file system (102, 104, and col. 5 line 46) being backed up (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8); and

adding a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) to the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) that associates copied allocation units (col. 10 line 38) in the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) with names of corresponding files (col. 10 line 51-54) from the file system (102, 104, and col. 5 line 46)

locating the locally-stored image file within the partition (col. 14 line 29-48);

initializing at least a subset (col. 1 line 41-46; e.g. formatting a partition) of the allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) of the partition not occupied by the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) including one or more allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) used for a directory area of the partition (col. 5 lines 7-8, and line 52);

extracting file data from the locally-stored image file into the initialized allocation units without disturbing the locally-stored image file (abstract, col. 22 line 16-21); and

creating a new directory area for the partition (col. 20 line 50-51) using the directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32).

Art Unit: 2167

With Respect to claim 42. A computer-readable medium comprising program code for backing up a file system in a partition comprising a plurality of allocation units, the computer-readable medium comprising:

program code for copying (col. 5 line 31-32) each allocation unit (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) occupied by a plurality of files (col. 11 line 56-65) of the file system (drawing references 102, 104, and col. 5 line 46) to a locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5), wherein the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) is located within (drawing reference 420) the same partition (col. 5 lines 7-8, and line 52) as the file system (102, 104, and col. 5 line 46) being backed up (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8); and

adding a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) to the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) that associates copied allocation units (col. 10 line 38) in the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) with names of corresponding files (col. 10 line 51-54) from the file system (102, 104, and col. 5 line 46).

With Respect to claim 43. A computer-readable medium comprising program code for restoring a file system to a partition comprising a plurality of allocation units, the computer-readable medium comprising:

Art Unit: 2167

program code to access (col. 14 line 28; e.g. locating an image) a locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) located within (drawing reference 420) the partition (col. 5 lines 7-8, and line 52) to which the file system (drawing references 102, 104, and col. 5 line 46) is to be restored (col. 5 line 40-45, col. 14 line 22-23, col. 19 line 6-8), the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) comprising a directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32) and file data for a plurality of files (col. 10 line 36-45);

program code to initialize at least a subset (col. 1 line 41-46; e.g. formatting a partition) of the allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) of the partition not occupied by the locally-stored image file (e.g. an “in-partition image”; col. 5 line 7-10, col. 12 line 65-col. 13 line 5) including one or more allocation units (col. 3 line 52-53, col. 5 line 31; e.g. a sector or cluster etc.) used for a directory area of the partition;

program code to extract the file data into the initialized allocation units without disturbing the locally-stored image file (abstract, col. 22 line 16-21); and

program code to create a new directory area for the partition using the directory map (col. 10 line 9-col. 11 line 2 and col. 19 line 20-32).

Response to Arguments

Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection. In light of the newly applied reference, the Examiner submits that Jenevein teaches and describes the present application substantially as claimed.

Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,665,779 to Polfer et al. The subject matter disclosed therein pertains to the pending claims (i.e. image partitioning).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT TIMBLIN whose telephone number is (571)272-5627. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2167

published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John R. Cottingham/
Supervisory Patent Examiner, Art Unit 2167

/ROBERT TIMBLIN/
Examiner, Art Unit 2167